

WHAT IS CLAIMED IS:

- 09742227 11500
1. A flexible wiring board comprising:  
a flexible insulating substrate;  
wiring which is provided only on one surface of the insulating substrate;  
an insulative protecting film, provided only on one surface of the insulating substrate, for protecting the wiring; and  
a terminal portion, provided on the wiring, to be connected to an external electrical component,  
wherein said insulative protecting film is a polymer film, and is placed to cover the wiring except for at least the terminal portion, and is bonded with the insulating substrate via an adhesive, and is thinner than the insulating substrate.
  2. The flexible wiring board as set forth in claim 1, wherein said insulative protecting film has a thickness which is a half or less than a thickness of the insulating substrate.
  3. The flexible wiring board as set forth in claim 1, wherein a boundary portion of the insulative protecting film and the terminal portion is distanced by at least 0.2 mm from an end of the external electrical

component which is connected to the terminal portion.

4. A flexible wiring board comprising:

a flexible insulating substrate;

first wiring provided on one surface of the insulating substrate;

first insulative protecting film, provided on one surface of the insulating substrate, for protecting the first wiring;

second wiring provided on the other surface of the insulating substrate;

second insulative protecting film, provided on the other surface of the insulating substrate, for protecting the second wiring; and

a terminal portion, provided on at least one of the first wiring and the second wiring, to be connected to an external electrical component,

wherein:

said first insulative protecting film and said second insulative protecting film are both polymer film, and are placed to cover the first wiring and the second wiring except for at least the terminal portion, and are bonded with the insulating substrate via an adhesive, and

at least one of said first insulative protecting film and said second insulative protecting film, which is

09713227 111500

connected to the surface on which the terminal portion is provided is thinner than the insulating substrate.

5. The flexible wiring board as set forth in claim 4, wherein the insulative protecting film which is thinner than the insulating substrate has a thickness which is a half or less than a thickness of the insulating substrate.

6. The flexible wiring board as set forth in claim 4, wherein:

said terminal portion is provided only on the first wiring, and

an end of the second insulative protecting film closer to the terminal portion is farther away from an end of the insulating substrate where the terminal portion is provided than an end of the first insulative protecting film closer to the terminal portion.

7. The flexible wiring board as set forth in claim 4, wherein a boundary portion between (a) one of the first insulative wiring board and the second insulative wiring board which is provided on the surface the terminal portion is provided and (b) the terminal portion is distanced by at least 0.2 mm from an end of a

0971227 11500

substrate of the external electrical component which is connected to the terminal portion.

8. An electrical device which includes a flexible wiring board and an electrical component, the flexible wiring board being connected to the electrical component while being laid over the electrical component at one end, and being bent at a portion other than the end portion,

said flexible wiring board comprising:

a flexible insulating substrate;

wiring which is provided only on one surface of the insulating substrate;

an insulative protecting film, provided only on one surface of the insulating substrate, for protecting the wiring; and

a terminal portion, provided on the wiring, to be connected to an external electrical component,

wherein said insulative protecting film is a polymer film, and is placed to cover the wiring except for at least the terminal portion, and is bonded with the insulating substrate via an adhesive, and is thinner than the insulating substrate.

9. The electrical device as set forth in claim 8,

00571222 11500

wherein the insulative protecting film has a thickness which is a half or less than a thickness of the insulating substrate.

10. The electrical device as set forth in claim 8, wherein a boundary portion of the insulative protecting film and the terminal portion is distanced by at least 0.2 mm from an end of a substrate of the external electrical component which is connected to the terminal portion.

11. The electrical device as set forth in claim 8, wherein:

said electrical component is a liquid crystal display element, and

said flexible wiring board supplies a signal to the liquid crystal display device via the wiring.

12. An electrical device which includes a flexible wiring board and an electrical component, the flexible wiring board being connected to the electrical device while being laid over the electrical device at one end, and being bent at a portion other than the end portion,

said flexible wiring board comprising:

a flexible insulating substrate;

0574337-14500

first wiring which is provided on one surface of the insulating substrate;

a first insulative protecting film, provided on one surface of the insulating substrate, for protecting the first wiring;

second wiring which is provided on the other side of the insulating substrate;

a second insulative wiring board, provided on the other side of the insulating substrate, for protecting the second wiring; and

a terminal portion, provided on at least one of the first wiring and the second wiring, to be connected to an external electrical component,

wherein:

said first insulative protecting film and said second insulative protecting film are both polymer film, and are placed to cover the first wiring and second wiring except for at least the terminal portion, and are bonded with the insulating substrate via an adhesive, and

at least one of said first insulative protecting film and said second insulative protecting film which is provided on the surface the terminal portion is provided is thinner than the insulating substrate.

13. The electrical device as set forth in claim 12,

09712227:11500

wherein the insulative protecting film which is thinner than the insulating substrate has a thickness which is a half or less than a thickness of the insulating substrate.

14. The electrical device as set forth in claim 12, wherein:

said terminal portion is provided only on one surface of the first wiring, and

an end of the second insulative protecting film closer to the terminal portion is farther away from an end of the insulating substrate where the terminal portion is provided than an end of the first insulative protecting film closer to the terminal portion.

15. The electrical device as set forth in claim 14, wherein the flexible wiring board is bent with the surface provided with the first wiring facing inward.

16. The electrical device as set forth in claim 12, wherein a boundary portion between (a) one of the first insulative protecting film and the second insulative protecting film which is provided on the surface of the insulating substrate on which the terminal portion is provided and (b) the terminal portion is distanced by at

005743227 4400

least 0.2 mm from an end of a substrate of the external electrical component which is connected to the terminal portion.

17. The electrical device as set forth in claim 12, wherein:

said electrical component is a liquid crystal display element, and

said flexible wiring board supplies a signal to the liquid crystal display element via the wiring.

*add:*

00577 44500